



# Lake Superior State University

## Obtaining ENERGY STAR Status

### Background

Lake Superior State University (LSSU) is a small public university located in Sault Ste Marie, Michigan. Jim Teunas, a Lead Account Executive for Johnson Controls, approached LSSU with the idea of fixing some of the campus infrastructure problems and getting ahead of the deferred maintenance curve while realizing substantial energy savings and positively impacting the campus marketing initiatives with an ENERGY STAR



partnership. By becoming an ENERGY STAR partner with the U.S. Environmental Protection Agency, LSSU made a commitment to the continuous improvement of its energy performance. This meant that LSSU would measure, track, and benchmark its energy performance, develop and implement a plan to improve its facilities and operations, and educate its staff and the public about its ENERGY STAR program and achievements.

### The Process & Outcome

Following an initial walkthrough and a signed project development agreement, Tina Brueckner, JCI Project Development Engineer, started the comprehensive study of the campus. During that time, a cross-functional team of key players from the university and JCI met and developed co-authored solutions to meet the project goals. These solutions were developed through a series of meetings that first identified the problem, then prioritized the problems, and finally provided solutions to the problems. This allowed the JCI team to fully understand the goals and challenges of the university. The outcome was a partnership and not a "project."

The retrofit portion of the project included 184 Facility Improvement Measures that provided a total annual energy and operational savings of \$429,347 and a payback of 10.63 years. The improvements included lighting retrofits, mechanical retrofits, steam trap retrofits, roof and window replacements, water saving measurements and many other enhancements to the 42 building campus.

A service contract supplemented the retrofit portion of the project by utilizing Johnson Controls to bring the campus up to current maintenance standards, implement a Computerized Management Maintenance System and train the LSSU maintenance staff to perform the proper maintenance on their equipment.

This contract is a declining service, seven year contract that will begin in year one with JCI performing 100% of the preventive maintenance tasks and consistently brings the LSSU staff up to speed throughout the seven years so that in year seven LSSU will perform 100% of the preventive maintenance tasks and JCI is only doing the high-end predictive diagnostics.

To accomplish the third goal of the program, Johnson Controls and LSSU developed an outreach program that utilizes LSSU students to impact the local K-12 students. Select LSSU Teacher Education students will be trained by the National Energy Foundation to take the Academy of Energy Education to the local school districts as an outreach program for the university

*For more information regarding ENERGY STAR or this particular Energy Project contact:*

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